

## CLAIMS

What is claimed is:

1. An interactive tool for viewing and manipulating a virtual content repository (VCR) having an application program interface (API), comprising:

providing a first graphical user interface (GUI) configured to present a hierarchical namespace wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;

providing a second GUI configured to present and to enable editing of content associated with the selected element in the first GUI;

providing a third GUI configured to present and to enable editing of schema associated with the selected element in the first GUI; and

wherein the VCR includes at least one content repository, and wherein the at least one content repository includes a service provider interface (SPI) compatible with the API.

2. The interactive tool of claim 1 wherein:

the namespace spans information in each one of the at least one content repository.

3. The interactive tool of claim 1 wherein:

an element can one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.

4. The interactive tool of claim 1 wherein:

the SPI enables the at least one content repository to be integrated into the VCR.

5. The interactive tool of claim 1 wherein:

the first GUI presents the namespace as a tree.

6. The interactive tool of claim 3 wherein:

the first GUI can selectively present nodes having only content or schemas.

7. The interactive tool of claim 1 wherein:  
the second GUI can presents all properties and values associated with the selected element in the first GUI.
8. The interactive tool of claim 1 wherein:  
the third GUI can present all property attributes associated with the selected element in the first GUI.
9. The interactive tool of claim 1 wherein:  
the first GUI allows elements to be moved, copied and deleted from the namespace.
10. The interactive tool of claim 1 wherein:  
selection of an element in the first GUI causes the presentation of the second GUI or the third GUI.
11. The interactive tool of claim 1, further comprising:  
providing a fourth GUI configured to present and to enable editing of configuration parameters associated with a selected content repository or root node in the first GUI.
12. An interactive tool for viewing and manipulating a virtual content repository (VCR) having an application program interface (API), comprising:  
providing a first graphical user interface (GUI) configured to present a hierarchical namespace wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;  
providing a second GUI configured to present and to enable editing of content associated with the selected element in the first GUI;  
providing a third GUI configured to present and to enable editing of schéma associated with the selected element in the first GUI;  
wherein the VCR includes at least one content repository, and wherein the at least one content repository includes a service provider interface (SPI) compatible with the API; and

wherein the SPI enables the at least one content repository to be integrated into the VCR.

13. The interactive tool of claim 12 wherein:  
the namespace spans information in each one of the at least one content repository.
14. The interactive tool of claim 12 wherein:  
an element can one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.
15. The interactive tool of claim 12 wherein:  
the first GUI presents the namespace as a tree.
16. The interactive tool of claim 14 wherein:  
the first GUI can selectively present nodes having only content or schemas.
17. The interactive tool of claim 12 wherein:  
the second GUI can presents all properties and values associated with the selected element in the first GUI.
18. The interactive tool of claim 12 wherein:  
the third GUI can present all property attributes associated with the selected element in the first GUI.
19. The interactive tool of claim 12 wherein:  
the first GUI allows elements to be moved, copied and deleted from the namespace.
20. The interactive tool of claim 12 wherein:  
selection of an element in the first GUI causes the presentation of the second GUI or the third GUI.

21. The interactive tool of claim 12, further comprising:  
 providing a fourth GUI configured to present and to enable editing of configuration parameters associated with a selected content repository or root node in the first GUI.
22. A machine readable medium having instructions stored thereon that when executed by a processor cause a system to:  
 provide a first graphical user interface (GUI) configured to present a hierarchical namespace wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;  
 provide a second GUI configured to present and to enable editing of content associated with the selected element in the first GUI;  
 provide a third GUI configured to present and to enable editing of schema associated with the selected element in the first GUI; and  
 wherein the VCR includes at least one content repository, and wherein the at least one content repository includes a service provider interface (SPI) compatible with the API.
23. The machine readable medium of claim 22 wherein:  
 the namespace spans information in each one of the at least one content repository.
24. The machine readable medium of claim 22 wherein:  
 an element can one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.
25. The machine readable medium of claim 22 wherein:  
 the SPI enables the at least one content repository to be integrated into the VCR.
26. The machine readable medium of claim 22 wherein:  
 the first GUI presents the namespace as a tree.

27. The machine readable medium of claim 24 wherein:  
the first GUI can selectively present nodes having only content or schemas.
28. The machine readable medium of claim 22 wherein:  
the second GUI can presents all properties and values associated with the selected element in the first GUI.
29. The machine readable medium of claim 22 wherein:  
the third GUI can present all property attributes associated with the selected element in the first GUI.
30. The machine readable medium of claim 22 wherein:  
the first GUI allows elements to be moved, copied and deleted from the namespace.
31. The machine readable medium of claim 22 wherein:  
selection of an element in the first GUI causes the presentation of the second GUI or the third GUI.
32. The machine readable medium of claim 22, further comprising instructions that when executed cause the system to:  
provide a fourth GUI configured to present and to enable editing of configuration parameters associated with a selected content repository or root node in the first GUI.
33. A system comprising:  
a means for providing a first graphical user interface (GUI) configured to present a hierarchical namespace wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;  
a means for providing a second GUI configured to present and to enable editing of content associated with the selected element in the first GUI;  
a means for providing a third GUI configured to present and to enable editing of schema associated with the selected element in the first GUI; and  
wherein the VCR includes at least one content repository, and wherein the at

least one content repository includes a service provider interface (SPI) compatible with the API signal.

34. A computer data signal embodied in a transmission medium, comprising:

a code segment including instructions to provide a first graphical user interface (GUI) configured to present a hierarchical namespace wherein the namespace includes at least one element, and wherein one of the at least one element can be selected;

a code segment including instructions to provide a second GUI configured to present and to enable editing of content associated with the selected element in the first GUI;

a code segment including instructions to provide a third GUI configured to present and to enable editing of schema associated with the selected element in the first GUI; and

wherein the VCR includes at least one content repository, and wherein the at least one content repository includes a service provider interface (SPI) compatible with the API.

35. The computer data signal of claim 34 wherein:

the namespace spans information in each one of the at least one content repository.

36. The computer data signal of claim 34 wherein:

an element can one of: 1) a federated root; 2) a content repository; 3) a hierarchy node; 4) a content node; 5) a schema node; 6) a hierarchy node having a schema; and 7) a content node having a schema.

37. The computer data signal of claim 34 wherein:

the SPI enables the at least one content repository to be integrated into the VCR.

38. The computer data signal of claim 34 wherein:

the first GUI presents the namespace as a tree.

39. The computer data signal of claim 36 wherein:  
the first GUI can selectively present nodes having only content or schemas.
40. The computer data signal of claim 34 wherein:  
the second GUI can presents all properties and values associated with the selected element in the first GUI.
41. The computer data signal of claim 34 wherein:  
the third GUI can present all property attributes associated with the selected element in the first GUI.
42. The computer data signal of claim 34 wherein:  
the first GUI allows elements to be moved, copied and deleted from the namespace.
43. The computer data signal of claim 34 wherein:  
selection of an element in the first GUI causes the presentation of the second GUI or the third GUI.
44. The computer data signal of claim 34, further comprising:  
a code segment including instructions to provide a fourth GUI configured to present and to enable editing of configuration parameters associated with a selected content repository or root node in the first GUI.